

UNITED STATES DISTRICT COURT
DISTRICT OF NEVADA

* * *

BALLY TECHNOLOGIES, INC.,

Plaintiff/Counter-Defendant,

v.

BUSINESS INTELLIGENCE SYSTEMS
SOLUTIONS, INC.,

Defendant/Counter-Plaintiff.

2:10-CV-00440-PMP-GWF

ORDER

Presently before the Court is Defendant Business Intelligence Systems Solutions, Inc.'s Motion for Summary Judgment of No Infringement (Doc. #128), filed on December 22, 2011. Plaintiff Bally Technologies, Inc. filed an Opposition (Doc. #151) on January 30, 2012. Defendant filed a Reply (Doc. #164) on February 10, 2012.

Also before the Court is Defendant's Motion for Summary Judgment of No Willful Infringement (Doc. #130), filed on December 22, 2011. Plaintiff filed an Opposition (Doc. #153) on January 30, 2012. Defendant filed a Reply (Doc. #157) on February 10, 2012.

Also before the Court is Plaintiff's Motion for Partial Summary Judgment Regarding BIS2's Invalidity Defense and Counterclaim (Doc. #135), filed on December 23, 2011. Defendant filed an Opposition (Doc. #140) on January 30, 2012. Plaintiff filed a Reply (Doc. #161) on February 10, 2012.

Also before the Court is Defendant's Motion to Strike or In Limine to Exclude Mr. Ferraro's Two Software Programs and All Material and Testimony Relating Thereto (Doc. #162), filed on February 10, 2012. Plaintiff filed an Opposition (Doc. #166) on

February 24, 2012. Defendant filed a Reply (Doc. #167) on March 5, 2012.

I. BACKGROUND

On March 29, 2010, Bally Technologies Inc. (“Bally”) filed suit against Business Intelligence Systems Solutions, Inc. (“BIS2”) for patent infringement. (Compl. (Doc. #1).) Bally claims ownership in United States Patent No. 7,221,367 (“the ‘367 patent”) and Patent No. 7,158,968 (“the ‘968 patent”).¹ (Id. ¶¶ 6-7, 10-11.) Bally asserts BIS2 infringed claims one, four, five, seven, ten, and eleven of the ‘367 patent and claims one through eight and nineteen through twenty-two of the ‘968 patent. (Joint Cl. Construction Statement (Doc. #36) at 2-5; Def.’s Opening Br. (Doc. #38) at 12, 30; Pl.’s Opening Br. (Doc. #40) at 13-30; Order [“Claim Construction Order”] (Doc. #72) at 12, 32.) The ‘367 and ‘968 patents relate to systems and methods of data analysis and data visualization for large quantities of data that merchants gather from their customers.

A. ‘367 Patent

The ‘367 patent is directed at providing data visualization techniques to present data in a visual format, such as monitoring the number of customers in line at a merchant’s store by video camera and graphically superimposing the data obtained over the floor plan of the monitored area. Claim one is an independent claim, which states in pertinent part:

A data visualization system comprising . . . a contour generator configured to generate and display one or more contour lines at least partly around each data point or group of data points, each contour line representing data values that are less than the data value[] of the data point[] around which the contour line is displayed.

(Decl. of Robert W. Busby (Doc. #129) [“Busby Decl.”], Ex. 2 at column 9.) Claims two through six are dependent on claim 1. (Id. at columns 9-10.)

¹ Bally originally brought a claim for patent infringement of United States Patent No. 6,871,194, but the Court granted Bally’s Stipulation to Dismiss with Prejudice (Doc. #114) on September 26, 2011. (Order (Doc. #116).) Accordingly, the Court will dismiss as moot BIS2’s second counterclaim (non-infringement of the ‘194 patent).

1 Claim seven is an independent claim, which states in pertinent part:

2 A method of data visualization comprising the steps of . . . generating
3 and displaying one or more contour lines at least partly around each
4 data point or group of data points, each contour line representing data
values that are less than the data value[] of the data point[] around
which the contour line is displayed.

5 (Id. at column 10.) Claims eight through twelve are dependent on claim seven. (Id.)

6 **B. '968 Patent**

7 The '968 patent is directed at allowing users to customize graphical
8 representations of data by including parameters in the database query regarding how to
9 display the data obtained. Claim one is an independent claim, which states in pertinent part:

10 A data visualization system executed on a storage device, comprising
11 . . . a contour generator configured to generate and display one or more
12 contour lines at least partly around each data point or group of data
13 points, each contour line representing data values that are less than the
data value[] of the data point[] around which the contour line is
displayed.

14 (Busby Decl., Ex. 1 at column 8.) Claims two through four are dependent on claim one.

15 (Id. at column 9.)

16 Claim five is an independent claim, which states in pertinent part:

17 A method of data visualization executed on a storage device
18 comprising the steps of . . . generating and displaying one or more
19 contour lines at least partly around each data point or group of data
20 points, each contour line representing data values that are less than the
data value[] of the data point[] around which the contour line is
displayed.

21 (Id.) Claims six through eight are dependent on claim five. (Id.)

22 Claim nine is an independent claim, which states in pertinent part:

23 A data visualization computer program embodied on a computer
24 readable storage device, comprising . . . a contour generator configured
25 to generate and display one or more contour lines at least partly around
26 each data point or group of data points, each contour line representing
data values that are less than the data value[] of the data point[] around
which the contour line is displayed.

1 (Id.) Claims ten through twelve are dependent on claim nine. (Id. at columns 9-10.)

2 Claim thirteen is an independent claim, which states in pertinent part:

3 A method of executing a database query expression on a storage device
 4 . . . the method comprising the steps of . . . generating and displaying
 5 one or more contour lines at least partly around each data point or
 6 group of data points, each contour line representing values of the key
 performance indicator specified in the contour subclause less than the
 data value of the data point around which the contour line is displayed.

7 (Id. at column 10.) Claim fourteen is dependent on claim thirteen, and claims fifteen
 8 through eighteen are dependent on claim fourteen. (Id.)

9 Lastly, claim nineteen is an independent claim, which states in pertinent part:

10 A computer program stored on tangible storage media comprising
 11 executable instructions executed on a storage device for performing a
 12 method of executing a database query expression . . . the method
 13 comprising the steps of . . . generating and displaying one or more
 14 contour lines at least partly around each data point or group of data
 points, each contour line representing values of the key performance
 indicator specified in the contour subclause less than the data value of
 the data point around which the contour line is displayed.

15 (Id. at columns 10-11.) Claim twenty is dependent on claim nineteen, and claims twenty-
 16 one through twenty-four are dependent on claim twenty. (Id. at columns 11-12.)

17 **C. Common Claim Limitations**

18 Each claim of the ‘367 and ‘968 patents requires, or is dependent on a claim that
 19 requires, that the product (1) generate and display one or more contour lines, and (2) each
 20 contour line represent data values less than the data value(s) of the data point(s) around
 21 which the contour line is displayed.² In its Claim Construction Order, the Court construed
 22 “contour line” to mean “a line connecting points of data having equal value,” and the Court

23
 24 ² Claims thirteen and nineteen of Patent ‘968 use “values of the key performance indicator
 25 specified in the contour subclause” instead of “data value” when describing the second common
 26 limitation. (Busby Decl., Ex. 1 at columns 10-11.) Neither party suggests that the two values differ
 for purposes of the second common limitation. Therefore, the Court will treat these two terms as
 synonymous for purposes of this Motion.

1 construed “data point” to mean “a location in the graphical display.” (Claim Construction
2 Order at 15, 21.) The Court further concluded that no construction was needed beyond the
3 ordinary meaning for all other terms relevant to this Motion.

4 **D. BIS2’s Software**

5 BIS2 offers the following description of the process by which its software
6 generates and displays data visualizations. First, the software uses data values, retrieved
7 from its database, to plot data points on a point map made up of grid cells. (Busby Decl.,
8 Ex. 5 ¶ 104, Ex. 6 ¶¶ 55-56.) Second, the software generates a color gradient icon for a data
9 point. (Busby Decl., Ex. 5 ¶ 104.) The software generates the icon by passing through the
10 data point to compute icon spread values for the grid cells surrounding the data point.
11 (Busby Decl., Ex. 6 ¶¶ 58, 60.) The data point represents the local maxima, or the highest
12 data value, for the icon. (Busby Decl., Ex. 5 ¶ 108, Ex. 6 ¶ 61.) A color is assigned to the
13 data point based on its data value. (Busby Decl., Ex. 5 ¶ 106.) Warmer tones are used for
14 higher data values, for example, an icon with a data point representing a high data value
15 would begin with a red data point. (Id. ¶¶ 104, 106.) The software then assigns, or
16 “spreads,” a color to each grid cell surrounding the data point based on the grid cell’s icon
17 spread value and distance from the data point. (Id. ¶¶ 112-13, Ex. 6 ¶¶ 68-72.) The colors
18 gradually transition from warm to cool tones as the icon spread values decrease and the
19 distance from the data point increases. (See Busby Decl., Ex. 5 ¶¶ 104, 111.) For example,
20 the grid cells surrounding a red data point would gradually transition to orange, then yellow,
21 then green, then blue. (See id. ¶¶ 104, 121.)

22 Third, the software pastes the icon onto the point map at the coordinates of the
23 data point. (Id. ¶ 106.) The icon is displayed as a 2D projection (top view) but can be
24 conceptualized as a 3D cone (side view) with higher data points creating taller cones,
25 although the software does not actually generate cones. (Id. ¶¶ 104, 106, Ex. 6 ¶ 61.)
26 Fourth, the software repeats steps two and three for each data point. (Busby Decl., Ex. 5

1 ¶ 107.)

2 Fifth, the software checks for icons that obscure too much of an adjacent icon.
3 (Id. ¶ 108, Ex. 6 ¶¶ 58, 65-66.) If one icon obscures an adjacent icon, the software inserts a
4 new small icon displaying a smaller data point. (Busby Decl., Ex. 5 ¶ 108, Ex. 6 ¶¶ 65-66.)
5 The smaller data point represents the local minima, or the lowest data value, for the icon.
6 (See Busby Decl., Ex. 6 ¶¶ 66-67.) The software makes a second pass through the data
7 point to compute icon spread values which are now inverted, or greater than the data point
8 at the center of the icon. (Id. ¶¶ 66-67, 77.) Colors are assigned to the data point and
9 surrounding grid cells, just as in step two. (See id. ¶¶ 67, 72.) However, because the data
10 point now represents a local minima, the colors gradually transition from cool to warm
11 tones as the icon spread values increase and the distance from the data point increases. (See
12 Busby Decl., Ex. 5 ¶ 121; see also Busby Decl. ¶ 18, Ex. 16 at 98:8-101:2 (Bally's expert,
13 Mr. Ferraro, stated at his deposition on November 3, 2011 that icon number 11-019 03 of
14 Exhibit 12 "appears to me to be inverted"), Ex. 17 (Exhibit 12 from Mr. Ferraro's
15 November deposition showing Mr. Ferraro's hand markings).)

16 Sixth, the software superimposes the point map over a floor plan. (Busby Decl.,
17 Ex. 5 ¶ 107.) To illustrate, a final data visualization of a casino floor would display a bank
18 of gaming machines with color gradient icons adjacent to each gaming machine. (Id.
19 ¶¶ 107, 111, 121.)

20 Bally's expert, Mr. Ferraro, describes BIS2's software similarly in some respects
21 but differently in other respects. Mr. Ferraro's description of the first step of the
22 process—retrieving data values and plotting data points—is substantially similar to BIS2's
23 description. (Decl. of Adam Yowell (Doc. #151) ["Yowell Decl."], Ex. D ¶¶ 40-41, 44.)
24 But Mr. Ferraro describes the second, third, and fourth steps differently. According to Mr.
25 Ferraro, the software generates a "contour representation" by projecting each data point as a
26 cone. (Id. ¶ 44.) The data point represents the highest data value. (Id.) The height of the

1 cone is used to assign “data values” to the grid cells surrounding the data point. (Id. ¶¶ 44,
2 46.) The data values of the surrounding grid cells are less than the data value of the data
3 point. (Id. ¶¶ 39, 44, 46, 48.) The cone has eight-way symmetry; therefore, all points that
4 are an equal distance from the data point have equal data values. (Id. ¶¶ 47, 53.) Next,
5 colors are assigned to each data value using preset breakpoints, creating tightly packed
6 contour lines. (Id. ¶¶ 45, 47-48.) Mr. Ferraro does not include the fifth step—generating an
7 inverted icon—in his description. Rather, Mr. Ferraro notes in his report that

8 [c]ertain modifications to this approach occur when the spread of two
9 closely located data points interact with each other. This causes a more
10 complex shape depending on the cumulative strategy and whether an
11 inverted cone should be used as formed in sinkSpread() function in
12 Spreader.java. This special case processing is not relevant to my
13 analysis, as a contour representation consisting of contour lines is still
14 created around each data point or grou[p] of data points.

15 (Id. ¶ 46 n.13.) Mr. Ferraro’s description of the sixth and final step—superimposing the
16 point map over a floor plan—is substantially similar to BIS2’s description. (Id. ¶ 40.)

17 **E. BIS2’s Motion for Summary Judgment of No Infringement**

18 BIS2 now moves for summary judgment of no infringement as to each asserted
19 claim of the ‘367 and ‘968 patents. BIS2 argues its software does not generate or display
20 contour lines; rather, its software generates color gradient icons. Bally responds that BIS2’s
21 color gradient icons are actually tightly packed contour lines. BIS2 also argues that even
22 assuming its software generates and displays contour lines, each contour line does not
23 represent a data value less than the data value of the data point around which the contour
24 line is displayed because its software inverts some of its icons creating contour lines around
25 local minima instead of local maxima. Bally responds that when BIS2’s software inverts
26 the icon, the underlying data value of the data point does not change and the contour lines
surrounding the data point become “even lower” than the data value of the data point. Bally
also argues every sub-image generated by BIS2’s software must contain at least one local
minima for BIS2 to avoid liability for infringement, but BIS2’s software does not always

1 invert at least one icon.

2 **II. LEGAL STANDARD**

3 Summary judgment is appropriate “if the movant shows that there is no genuine
4 dispute as to any material fact and the movant is entitled to judgment as a matter of law.”
5 Fed. R. Civ. P. 56(a). A fact is “material” if it might affect the outcome of a suit, as
6 determined by the governing substantive law. Anderson v. Liberty Lobby, Inc., 477 U.S.
7 242, 248 (1986). An issue is “genuine” if sufficient evidence exists such that a reasonable
8 fact finder could find for the non-moving party. Villiarimo v. Aloha Island Air, Inc., 281
9 F.3d 1054, 1061 (9th Cir. 2002).

10 The party “seeking summary judgment always bears the initial responsibility of
11 informing the district court of the basis for its motion, and identifying those portions of the
12 pleadings, depositions, answers to interrogatories, and admissions on file, together with the
13 affidavits, if any, which it believes demonstrate the absence of a genuine issue of material
14 fact.” Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986) (quotation omitted). The burden
15 then shifts to the non-moving party to go beyond the pleadings and set forth specific facts
16 demonstrating there is a genuine issue of material fact for trial. Fairbank v. Wunderman
17 Cato Johnson, 212 F.3d 528, 531 (9th Cir. 2000). Where a party fails to offer evidence
18 sufficient to establish an element essential to its case, no genuine issue of material fact can
19 exist, because “a complete failure of proof concerning an essential element of the
20 nonmoving party’s case necessarily renders all other facts immaterial.” Celotex, 477 U.S.
21 at 322-23. The Court views all evidence in the light most favorable to the non-moving
22 party. Cnty. of Tuolumne v. Sonora Cmty. Hosp., 236 F.3d 1148, 1154 (9th Cir. 2001).

23 **III. DISCUSSION**

24 **A. Patent Infringement**

25 The parties dispute whether BIS2’s software satisfies the first common limitation,
26 that the software generate and display one or more contour lines. First, BIS2 argues its

1 software generates color gradient icons from icon spread values and that the icons contain
2 no lines of any kind, nor does the software contain source code for generating lines. Bally
3 responds that BIS2's color gradient icons are actually tightly packed lines. Second, BIS2
4 argues even if its software does generate lines, the lines do not connect points of data of
5 equal value because a grid representing the icon spread values of a color gradient icon
6 reveals no adjacent grid cells of equal value. Bally responds that BIS2's software
7 systematically assigns a color to each data value and the color gradient icons reveal rings of
8 color representing adjacent grid cells of equal value. Third, BIS2 argues icon spread values
9 are not the same as data values; Bally does not directly respond to this argument. Fourth,
10 BIS2 argues even if its software generates contour lines, it does not display contour lines.
11 Bally responds that contour lines need not be visible or discernible to be displayed.

12 The parties also dispute whether BIS2's software satisfies the second common
13 limitation, that each contour line represent data values less than the data value of the data
14 point around which the contour line is displayed. BIS2 argues that because the claims
15 require that each contour line represent data values less than the data value of the data point
16 and some of BIS2's alleged contour lines represent data values greater than the data value
17 of the data point, then BIS2's software does not satisfy the second common limitation.
18 BIS2 concedes that if the Court assumes its color gradient icons are made up of contour
19 lines, then many of BIS2's alleged contour lines are centered around a data point that
20 represents the highest data value in the icon. As a result, the contour lines surrounding the
21 data point represent data values less than the data value of the data point, creating a
22 standard icon, consistent with the second common limitation. However, BIS2 contends its
23 software inverts some of its color gradient icons. The data point of an inverted icon
24 becomes the lowest data value in the icon. As a result, the alleged contour lines
25 surrounding the data point represent data values greater than the data value of the data
26 point, which is the opposite of the second common limitation. Accordingly, BIS2 argues its

1 software does not satisfy the second common limitation and therefore BIS2 is entitled to
2 summary judgment of no infringement.

3 Bally responds that when BIS2's software inverts the icon, the underlying data
4 value of the data point does not change. Although the color scheme is inverted, the data
5 values of the contour lines surrounding the data point become "even lower" than the data
6 value of the data point. Next, Bally argues that even if the contour lines of an inverted icon
7 do not represent data values less than the data value of the data point, every sub-image
8 generated by BIS2's software must contain at least one inverted icon for BIS2 to avoid
9 liability for infringement. Bally contends the best BIS2 can argue is that its software always
10 checks to see if a standard icon needs to be inverted, but its software does not always invert
11 at least one standard icon.

12 Patent infringement occurs when someone "without authority makes, uses, offers
13 to sell, or sells any patented invention, within the United States or imports into the United
14 States any patented invention during the term of the patent therefor." 35 U.S.C. § 271(a).
15 Determination of infringement is a two step process. First, the court determines the
16 meaning and scope of the asserted patent claims. Cybor Corp. v. FAS Techs., Inc., 138
17 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). Claim language is construed with its ordinary
18 and customary meaning, "the meaning that the [language] would have to a person of
19 ordinary skill in the art in question at the time of the invention." Phillips v. AWH Corp.,
20 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). Second, the court compares the
21 accused product to the construed claims to determine whether all of the claim limitations
22 are present, either literally, or by equivalent, in the accused product.³ Innovation Toys,
23 LLC v. MGA Entm't, Inc., 637 F.3d 1314, 1318-19 (Fed. Cir. 2011). The accused product
24 or method does not infringe "unless it contains each limitation of the claim, either literally
25

26 ³ Bally does not allege patent infringement under the doctrine of equivalents. (Compl.; Pl.'s
Reply in Supp. of Mot. Prelim. Inj. (Doc. #31) at 6; Busby Decl., Ex. 5 ¶ 19.)

1 or by an equivalent.” Freedman Seating Co. v. Am. Seating Co., 420 F.3d 1350, 1358 (Fed.
2 Cir. 2005). Whether the accused product or method meets each claim limitation is a
3 question of fact. Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998). Thus,
4 summary judgment of no infringement is appropriate in a literal infringement case when no
5 reasonable jury could find that every limitation in the asserted claim is found in the accused
6 product. Gart v. Logitech, Inc., 254 F.3d 1334, 1339 (Fed. Cir. 2001).

7 Here, no genuine issue of material fact remains that the accused BIS2 software
8 does not infringe the patents-in-suit because BIS2’s software does not embody every
9 limitation of the asserted claims. Assuming without deciding that BIS2’s software satisfies
10 the first common limitation for all asserted claims,⁴ BIS2’s software does not satisfy the
11 second common limitation because BIS2 has met its burden of demonstrating that no
12 genuine issue of material fact remains that each alleged contour line generated by BIS2’s
13 software does not represent data values less than the data value of the data point around
14 which the contour line is displayed. In other words, BIS2 has met its burden of
15 demonstrating that no genuine issue of material fact remains that BIS2’s software does not
16 generate and display each alleged contour line around a local maxima.

17 1. Bally’s First Theory of Infringement

18 Bally offers no evidence of its theory that when BIS2’s software inverts a
19 standard icon, the underlying data value of the data point does not change and the data
20 values of the contour lines surrounding the data point become “even lower” than the data
21 value of the data point. Furthermore, Bally’s theory that the data values of the contour lines
22 surrounding the data point become “even lower” than the data value of the data point is
23

24 ⁴ BIS2 argues that icon spread values, not data values, are used to build color gradient icons;
25 therefore, the alleged contour lines do not represent data values. (Def.’s Mot. Summ. J. at 18; Busby
26 Decl., Ex. 15 ¶ 1, Ex. 16 at 72:11-73:19.) However, the Court need not address this distinction because
even assuming the alleged contour lines represent data values, no genuine issue of material fact remains
as to whether those data values are less than the data value of the data point.

1 contradicted by its own expert, Mr. Ferraro, who testified that “inverted cones . . . could
2 have values that decrease from the outside—from the furthest extent of the cone inward
3 towards the center.” (Busby Decl., Ex. 16 at 140:12-14.)

4 BIS2 offers evidence consistent with Mr. Ferraro’s testimony. Specifically,
5 BIS2’s expert, Mr. Berry, states that “in the second pass, some smaller icons for local
6 minima are created.” (Busby Decl., Ex. 5 ¶ 108.) BIS2’s other expert, Mr. Baer, states that
7 the second pass inserts a “new small color gradient icon” displaying a “smaller data point.”
8 (Busby Decl., Ex. 6 ¶¶ 65-66.) “[T]he small data values appear as an inverted cone” with
9 “icon spread z-values surrounding the coordinates of a data point that are greater than the
10 icon spread z-value at the actual coordinates of the data point.” (Id. ¶¶ 66-67.) Mr. Baer
11 concludes that “[t]he BIS2 source code does not generate and display contour lines. But,
12 even if it does, each of the contour lines is not ‘less than’ the data points they are around.”
13 (Id. ¶ 67.)

14 2. Bally’s Second Theory of Infringement

15 Bally argues that even if the contour lines of an inverted icon do not represent
16 data values less than the data value of the data point, every sub-image generated by BIS2’s
17 software must contain at least one inverted icon for BIS2 to avoid liability for infringement.
18 Bally contends the best BIS2 can argue is that its software always checks to see if a
19 standard icon needs to be inverted, but its software does not always invert at least one
20 standard icon. In other words, Bally argues that BIS2’s software infringes because it is
21 capable of performing the patented method, and proof of actual performance is not required.

22 Pursuant to 35 U.S.C. § 101, the following four classes of subject matter are
23 eligible for patent protection: “process, machine, manufacture, or composition of matter.”
24 Process claims, also known as method claims, describe a series of acts or steps, whereas
25 machine claims, also known as product or apparatus claims, describe a tangible item. 35
26 U.S.C. § 100(b); Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 576 F.3d 1348, 1362-63

1 (Fed. Cir. 2009) (en banc).

2 *a. Method Claims*

3 In Cardiac Pacemakers, the United States Court of Appeals for the Federal
 4 Circuit set forth the rule for infringement of a method claim. 576 F.3d at 1359. “A method
 5 claim is directly infringed only by one practicing the patented method.” Id. (quoting Joy
 6 Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 775 (Fed. Cir. 1993). In Joy Technologies, the
 7 Federal Circuit further explained that a method claim is directly infringed by the sale of an
 8 apparatus that actually performs the method, but a method claim is not directly infringed by
 9 the sale of an apparatus that merely is capable of performing the method. 6 F.3d at 774-75.
 10 Furthermore, a method claim that uses “comprising” as a transitional phrase between the
 11 preamble and the body of the claim, does not exclude additional steps. Dow Chem. Co. v.
 12 Sumitomo Chem. Co., 257 F.3d 1364, 1380-81 (Fed. Cir. 2001). As a result, “infringement
 13 is not avoided by the presence of elements or steps in addition to those specifically recited
 14 in the claim . . . provided that all of the elements stated in the claim are present.” Vivid
 15 Techs., Inc. v. Am. Sci. & Eng’g, Inc., 200 F.3d 795, 811-12 (Fed. Cir. 1999). Similarly,
 16 “an accused product that sometimes, but not always, embodies a claimed method
 17 nonetheless infringes.” Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424
 18 F.3d 1293, 1311-12 (Fed. Cir. 2005) (quotations omitted).

19 In short, actual performance of every step of the recited method is required to
 20 prove direct infringement of a method claim. A defendant cannot avoid liability by adding
 21 steps to the recited method, but the plaintiff still must prove actual performance of every
 22 step of the recited method.

23 Here, independent claim seven of the ‘367 patent and independent claims five
 24 and thirteen of the ‘968 patent are method claims. (Busby Decl., Ex. 1 at columns 9-10, Ex.
 25 2 at column 10.) All three claims include the transitional phrase “comprising the steps of,”
 26 conveying a non-exhaustive list of steps. (Id.) When compared to the recited steps, BIS2’s

1 software adds the additional step of inverting some of the standard icons, which results in
2 contour lines around local minima. Because the second claim limitation requires that the
3 software generate and display each contour line around local maxima, not some contour
4 lines around local maxima and some around local minima, BIS2's software does not
5 perform the claimed method when it performs this additional step.

6 But BIS2 cannot avoid liability for infringement of the asserted method claims
7 simply because its software sometimes does not perform the claimed method, provided
8 Bally can offer proof that sometimes BIS2's software actually performs the claimed method
9 by generating and displaying each contour line around a local maxima. Bally could have
10 met its burden by offering evidence of a data visualization generated by BIS2's software
11 that displays standard icons only. But Bally fails to identify such proof in the record.
12 Because of Bally's failure of proof, no genuine issue of material fact remains that BIS2's
13 software does not infringe the asserted method claims.

14 *b. Apparatus Claims*

15 While a method claim in certain circumstances can be infringed by a product that
16 infringes some of the time and does not infringe other times, apparatus claims are infringed
17 only by an apparatus that satisfies all the claim limitations all of the time. Cross Med.
18 Prods., 424 F.3d at 1311-12. For example, if a software program performs the recited
19 method every fifth time the program is run, then the software program is not infringing the
20 method claim four out of five times the program is run, but it is infringing the method claim
21 on the fifth time. But if the software program only satisfies four out of five of the apparatus
22 claim limitations, the program does not infringe the apparatus claim. Either the software
23 program is a match for the asserted apparatus claim, or it is not a match, because "apparatus
24 claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch &
25 Lomb Inc., 909 F.2d 1464, 1468 (Fed. Cir. 1990) (emphasis omitted).

26 Some apparatus claims recite the structure of the apparatus and the functions it

1 performs. See Typhoon Touch Techs., Inc. v. Dell, Inc., 659 F.3d 1376, 1380 (Fed. Cir.
2 2011). Other apparatus claims recite the structure of the apparatus and the functions it is
3 capable of performing. See id. Courts refer to the later category as an apparatus claim
4 “drawn to capability.” Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1204 (Fed.
5 Cir. 2010). An apparatus claim “drawn to capability” can be infringed by an apparatus that
6 is reasonably capable of satisfying all the claim limitations all of the time. Id. By contrast,
7 an apparatus claim not drawn to capability requires proof that the accused apparatus
8 actually satisfies all the claim limitations all of the time. Id.

9 In Finjan, the asserted apparatus claims recited software components with
10 specific purposes, for example, “a logical engine for preventing execution.” Id. at 1204-05
11 (emphasis omitted). The claims did not require that the software components be active or
12 enabled to perform the purposes, just that they be capable of performing the claimed
13 purposes. Id. The Federal Circuit held that such language was “drawn to capability,” thus,
14 the proper test was whether the accused apparatus was reasonably capable of satisfying all
15 of the claim limitations. Id.

16 In Ball Aerosol and Speciality Container, Inc. v. Limited Brands, Inc., the
17 asserted apparatus claim recited a candle tin comprising a holder and a cover to be placed
18 under the holder when the candle is lit to prevent scorching the surface on which the holder
19 is placed. 555 F.3d 984, 987-88 (Fed. Cir. 2009). The asserted apparatus claim also recited
20 that the holder have feet on the bottom “resting upon the . . . cover to seat the holder on the
21 cover.” Id. at 988. The Federal Circuit concluded that the claim language was not drawn to
22 capability because it “specifie[d] a particular configuration.” Id. at 994. The fact that the
23 accused candle holder was capable of being configured as recited was insufficient for a
24 finding of infringement, and the plaintiff failed to offer evidence that the accused candle
25 holder was ever placed in the infringing configuration. Id. at 995.

26 In Brocade Communications Systems, Inc. v. A10 Networks, Inc., the first

1 asserted apparatus claim recited a switch “configured to act in concert with one or more
2 other switches” to perform certain functions. --- F. Supp. 2d ----, 2012 WL 2150305, at *4
3 (N.D. Cal. June 12, 2012). The district court compared this apparatus claim to two other
4 apparatus claims that did not include “configuration language that could arguably require
5 actual operation.” Id. at *6 (internal quotation marks omitted). Rather the other two
6 apparatus claims recited an article of manufacture that included “instructions . . .
7 executable” to perform certain functions. Id. The district court concluded that “instructions
8 . . . executable” meant instructions capable of being executed. Id.

9 i. Claims 19-22 of the ‘968 Patent

10 The Court previously addressed Bally’s capability argument in its Claim
11 Construction Order in the context of claims 19-22 of the ‘968 patent. (Claim Construction
12 Order at 39-40.) The Court concluded that claims 19-22 are product or apparatus claims,
13 and the claim language requires actual execution of the recited function; therefore, actual
14 satisfaction of all the claim limitations is required to establish infringement on claims 19-22
15 of the ‘968 patent. (Id.)

16 Bally fails to identify any evidence in the record that BIS2’s software actually
17 satisfies all of the claim limitations. More specifically, Bally fails to offer evidence that
18 BIS2’s software includes “instructions executed on a storage device” for “generating and
19 displaying one or more contour lines . . . each contour line representing [data values] less
20 than the data value of the data point.” BIS2 offers evidence that its software includes code
21 for generating and displaying some contour lines around local maxima, but its software
22 does not include code for generating and displaying each contour line around local maxima
23 because BIS2’s software also will generate and display some contour lines around local
24 minima. Because the claim limitation requires each, not some, no genuine issue of material
25 fact remains that BIS2’s software does not infringe claims 19-22 of the ‘968 patent.

26 ///

1 ii. Claim One of the ‘367 Patent and Claims One and Nine
2 of the ‘968 Patent

3 The Court has not previously ruled on whether the remaining independent claims,
4 claim one of the ‘367 patent and claims one and nine of the ‘968 patent, are apparatus
5 claims drawn to capability. All three claims recite an apparatus (i.e., a system or computer
6 program) “comprising . . . a contour generator configured to generate and display one or
7 more contour lines . . . each contour line representing data values that are less than the data
8 value[] of the data point[].” (Busby Decl., Ex. 1 at columns 8-9, Ex. 2 at column 9.)
9 Similar to the configuration language in Ball Aerosol and Brocade, here, each claim
10 requires that the apparatus be “configured to” perform the recited function. Accordingly,
11 just as in Ball Aerosol and Brocade, actual satisfaction of all the claim limitations is
12 required to establish infringement. As discussed above with regard to claims 19-22 of the
13 ‘968 patent, Bally fails to identify any evidence in the record that BIS2’s software actually
satisfies all of the claim limitations.

14 Even assuming that claim one of the ‘367 patent and claims one and nine of the
15 ‘968 patent are drawn to capability, Bally fails to identify any evidence in the record that
16 BIS2’s software is capable of satisfying all of the claim limitations. Specifically, Bally fails
17 to offer evidence that BIS2’s software comprises a contour generator that is capable of
18 being configured to generate and display each contour line around a local maxima. Rather,
19 the evidence shows BIS2’s software includes a contour generator capable of being
20 configured to generate and display some contour lines around a local maxima and some
21 around a local minima. In sum, Bally fails to identify any evidence in the record that
22 BIS2’s software includes a contour generator configured to, or capable of being configured
23 to, generate and display each contour line around a local maxima. As such, no genuine
24 issue of material fact remains that BIS2’s software does not infringe the asserted apparatus
25 claims.

26 BIS2 has met its burden of demonstrating that no genuine issue of material fact

1 remains that its software does not infringe the '367 and '968 patents. Bally has failed to set
2 forth specific facts demonstrating there is a genuine issue of material fact for trial.
3 Therefore, the Court will grant BIS2's Motion for Summary Judgment of No Infringement.
4 The Court also will dismiss as moot BIS2's first and third (non-infringement)
5 counterclaims.

6 **B. Willful Infringement**

7 BIS2 moves for summary judgment on Bally's willful infringement claim. (Mot.
8 Summ. J. No Willful Infringement (Doc. #130).) "[T]o establish willful infringement, a
9 patentee must show by clear and convincing evidence that the infringer acted despite an
10 objectively high likelihood that its actions constituted infringement of a valid patent." In re
11 Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc). Because Bally cannot
12 establish the predicate infringement, Bally cannot establish willful infringement. Therefore,
13 the Court will grant BIS2's Motion for Summary Judgment of No Willful Infringement.

14 **C. Invalidity**

15 In response to Bally's allegations of patent infringement, BIS2 asserted invalidity
16 of the '367 and '968 patents as an affirmative defense. (Am. Answer (Doc. #22) at 5 ¶ 19.)
17 BIS2 also counterclaimed for a declaratory judgment of patent invalidity. (Id. at 7 ¶ 1.)
18 Bally now moves for partial summary judgment as to BIS2's invalidity defense and
19 counterclaim. (Mot. Partial Summ. J. Invalidity Defense & Countercl. (Doc. #135).)

20 A finding of no infringement renders moot an affirmative defense of invalidity to
21 a patent infringement claim. PODS, Inc. v. Porta Stor, Inc., 484 F.3d 1359, 1368 (Fed. Cir.
22 2007). However, whether a finding of no infringement renders moot a counterclaim for
23 declaratory judgment of patent invalidity depends on whether an actual case or controversy
24 remains between the parties. See Benitec Austl., Ltd. v. Nucleonics, Inc., 495 F.3d 1340,
25 1345-46 (Fed. Cir. 2007) (addressing whether subsequent events can divest a district court
26 of jurisdiction over a patent invalidity counterclaim); see also Altwater v. Freeman, 319 U.S.

1 359, 363 (1943) (distinguishing between an invalidity defense, which is disposed of by a
2 decision of non-infringement, and an invalidity counterclaim, which is not necessarily
3 disposed of by a decision of non-infringement). An actual controversy must exist at all
4 stages of review. 28 U.S.C. § 2201(a); Steffel v. Thompson, 415 U.S. 452, 459 & n.10
5 (1974). The party seeking the declaratory judgment bears the burden of demonstrating the
6 existence of an actual case or controversy “at the time the claim for declaratory relief was
7 filed and that it has continued since.” Benitec Austl., 495 F.3d at 1344.

8 Here, BIS2 presents no argument or evidence that an actual case or controversy
9 would exist to support declaratory judgment jurisdiction in the event the Court finds no
10 infringement. Furthermore, in response to Bally’s argument for summary judgment on
11 BIS2’s invalidity defense and counterclaim, BIS2 states that it “seeks to prove only that
12 Bally’s infringement position cannot be correct as it would necessarily invalidate claims of
13 the asserted patents.” (Def.’s Opp’n to Mot. Summ. J. Regarding Invalidity (Doc. #140) at
14 2.) Because Bally’s infringement position fails for other reasons, as discussed above,
15 BIS2’s stated purpose for bringing its invalidity counterclaim no longer applies. Therefore,
16 the Court will deny as moot BIS2’s Motion for Partial Summary Judgment Regarding
17 BIS2’s Invalidity Defense and Counterclaim.

18 **D. Admissibility of Mr. Ferraro’s Software**

19 BIS2 moves to strike or to exclude Mr. Ferraro’s two software programs and all
20 material and testimony related thereto. (Mot. to Strike or In Limine to Exclude (Doc.
21 #162).) The Court will evaluate whether the disputed evidence is relevant only as to Bally’s
22 infringement claim because Bally does not argue that the disputed evidence is relevant to
23 any other claim. The disputed evidence relates to the first common limitation to all asserted
24 claims, but does not relate to the second common limitation. Specifically, Mr. Ferraro
25 refers to the process by which BIS2’s software inverts icons as “not relevant” to his
26 analysis. (Yowell Decl., Ex. D ¶ 46 n.13.) As discussed above, the Court need not address

1 the first common limitation because no genuine issue of material fact remains that BIS2's
2 software does not satisfy the second common limitation. Therefore, the Court will deny as
3 moot BIS2's Motion to Strike.

4 Furthermore, the disputed evidence is not relevant beyond summary judgment
5 because the Court finds no genuine issue of material fact remains that BIS2's software does
6 not infringe the '367 and '968 patents and Bally does not argue that the disputed evidence is
7 relevant to any claim other than infringement. Therefore, the Court will deny as moot
8 BIS2's Motion In Limine to Exclude.

9 **IV. CONCLUSION**

10 IT IS THEREFORE ORDERED that Defendant Business Intelligence Systems
11 Solutions, Inc.'s Motion for Summary Judgment of No Infringement (Doc. #128) is hereby
12 GRANTED.

13 IT IS FURTHER ORDERED that Defendant's first, second, and third (non-
14 infringement) counterclaims are hereby DISMISSED as moot.

15 IT IS FURTHER ORDERED that Defendant's Motion for Summary Judgment of
16 No Willful Infringement (Doc. #130) is hereby GRANTED.

17 IT IS FURTHER ORDERED that Plaintiff Bally Technologies, Inc.'s Motion for
18 Partial Summary Judgment Regarding BIS2's Invalidity Defense and Counterclaim (Doc.
19 #135) is hereby DENIED as moot.

20 IT IS FURTHER ORDERED that Defendant's Motion to Strike or In Limine to
21 Exclude Mr. Ferraro's Two Software Programs and All Material and Testimony Relating
22 Thereto (Doc. #162) is hereby DENIED as moot.

23
24 DATED: August 23, 2012

25 
26 PHILIP M. PRO
United States District Judge